

# How Many?



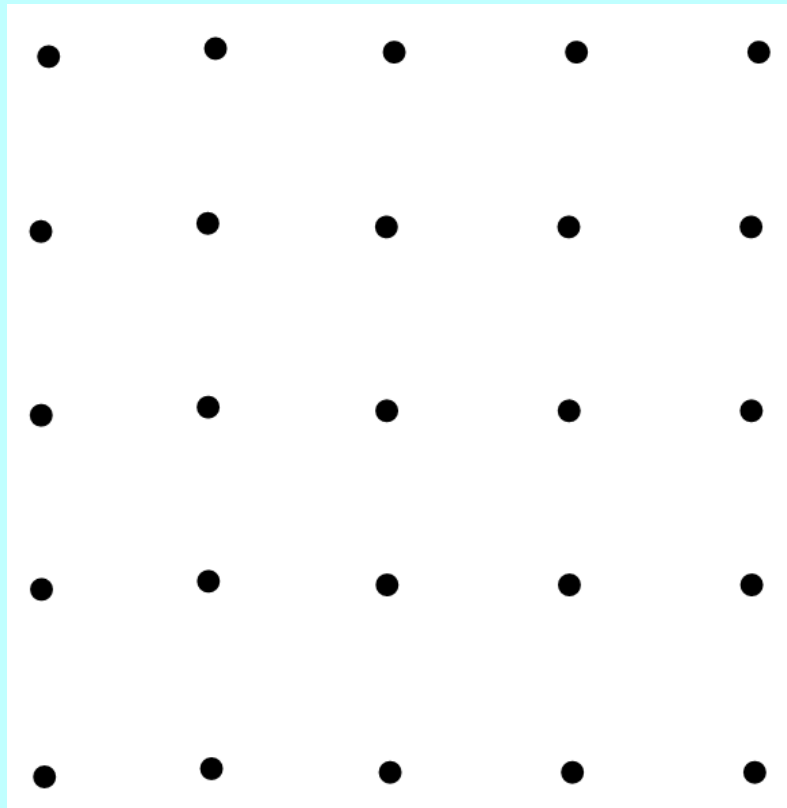
teacher notes

Nancy Norem Powell

<http://smartboardsmarty.wikispaces.com>

<http://napmath.wordpress.com>

How many  
squares can  
you make  
using the  
lattice points  
shown?

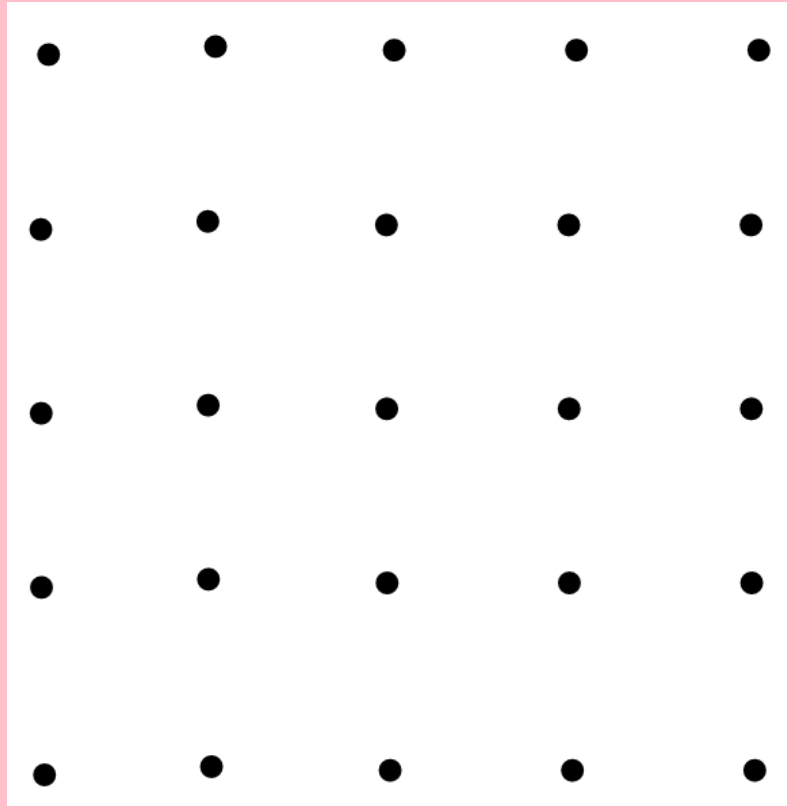


There are  
more than  
20!

Press  
here for  
Hint 2

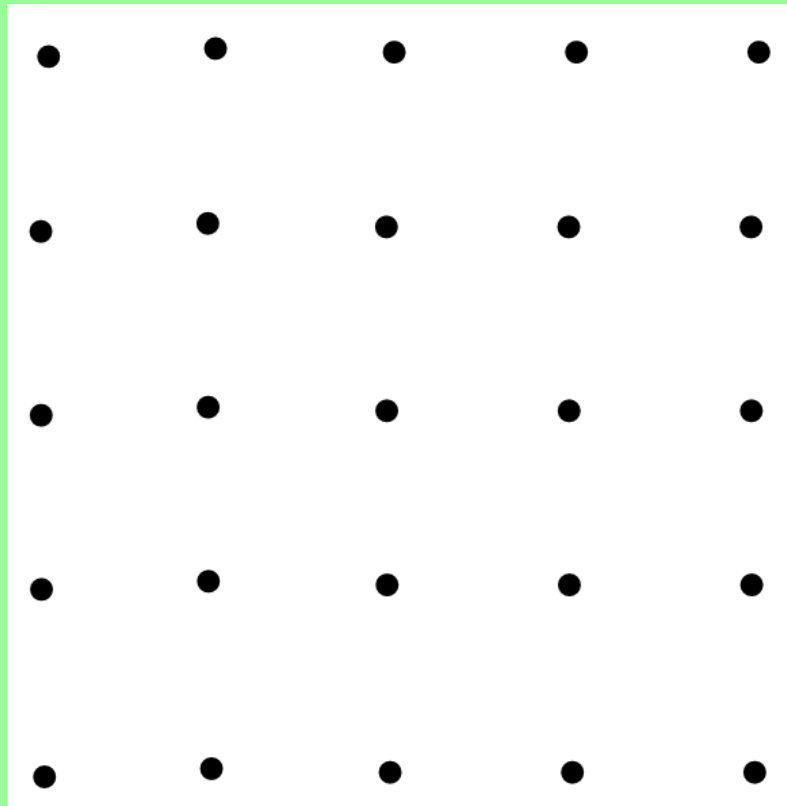
Is there a formula that can find this number for  
an  $n \times n$  grid?

How many  
rectangles  
can you make  
using the  
lattice points  
shown?



Is there a formula that can find this number for  
an  $n \times n$  grid?

How many  
rhombi can  
you make  
using the  
lattice points  
shown?



Is there a formula that can find this number for  
an  $n \times n$  grid?

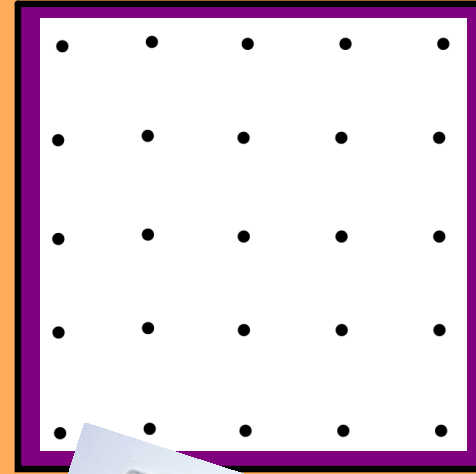
This activity can easily be done with dot paper or geoboards.

It is a great opportunity to get students challenging themselves to think a little differently to find all of the shapes. Sides don't need to be made of vertical or horizontal lines... but don't mention that to students!

Students using an organized list might be at an advantage when it comes to finding a generalization with an  $n \times n$  grid of lattice points.

#### Teaching Tip:

As you walk around the room, check student work. Keep track on the SMART board of the numbers of shapes that students find to encourage others to continue to look for more.



## Create Activities for Your SMART™ Board

Discounts are available for multiple books.

Become a Friend of **Visions Technology** on Facebook and find notifications of more free Notebook files to download.

<http://www.teamvistech.com/index.php/create-activities-for-your-smart-board-single.html>



Resources for SMART™ Board users

<http://smartboardsmarty.wikispaces.com/>



Resources for your SMART™ Board lessons

<http://resourcegarden.wikispaces.com/>

Apr 13-8:52 PM